TASK ORDER

GST0012AJ0085

Enterprise Information Technology Support Services

in support of:

National Defense University (NDU)



Issued to: General Dynamics One Source

Issued by:
Federal Systems Integration and Management Center (FEDSIM)
2100 Crystal Drive
Suite 800
Arlington, VA 20406

July 2012 FEDSIM Project Number DE0060

NOTE: The Section numbers in this task order (TO) correspond to the Section numbers in the Alliant Contract. Section C of the contractor's Alliant Contract is applicable to this TO and is hereby incorporated by reference. In addition, the following applies:

PERFORMANCE WORK STATEMENT

The references to TOR Attachments in the PWS correspond to the attachments listed in Section J of the Task Order Request (TOR) Statement of Objectives, GSC-QF0B-12-0085, Enterprise Information Technology Support Services in support of: National Defense University (NDU) and these attachments are also incorporated by reference.

SECTION C – PERFORMANCE WORK STATEMENT

C.1 BACKGROUND

The National Defense University (NDU) is an internationally recognized graduate-level university with five colleges and multiple centers of excellence focused on education, research, and outreach in national security matters. With campuses at Ft. McNair (Washington, DC), Norfolk, Virginia (VA) (the Joint Forces Staff College (JFSC)), and Ft. Bragg, North Carolina (NC), NDU is a worldwide entity with reach and influence extending throughout the U.S. and international community. NDU is the premier center for Joint Professional Military Education and is under the direction of the Chairman of the Joint Chiefs of Staff.

NDU relies heavily on computer systems to meet its training, research, and outreach mission and to conduct daily operations. The University requires innovation and the use of industry best practices to lead its information technology (IT) infrastructure into a new service paradigm while maximizing the use of available and emerging technologies to meet the dynamic needs and challenges faced by NDU's students, faculty, and stakeholders.

The NDU computing environment includes commercial hardware and software products as well as some NDU-specific systems (e.g., DES v1, DES v2). The TOR Attachment B includes a Consolidated Software and Hardware List, and the TOR Attachment C provides Joint Forces Staff College (JFSC) Norfolk, VA hardware, software, and network devices spreadsheet that provide information about tools and applications currently used by NDU. TOR Attachment X contains wireless access objectives that are applicable to this PWS. NDU currently provides IT components to the contractor as Government Furnished Property (GFP).

The NDU unclassified network operates at Mandatory Access Control (MAC) II Sensitive security classification level. Though NDU has an ".edu" web address, NDU should be considered a ".mil" and must adhere to all DoD policies, directives, and configuration requirements that apply to a MAC II Sensitive .mil network. NDU is migrating to a "Bring your own device" environment for students. The students will use their own devices to connect to a DoD secured wireless internet enclave and utilize Google cloud accounts for e-mail, collaboration, and other IT services.

C.1.1 PURPOSE

The purpose of the task order is to provide a full range of IT support services, and promote and implement innovation across the NDU enterprise. The contractor shall provide the following benefits:

- Maximize IT system availability and connectivity;
- Ensure all IT systems are secure and maintained;
- Ensure end user connectivity and support needs are met;
- Improve the NDU infrastructure exploiting legacy systems and exploring new technologies and innovative solutions which may reduce total cost or improve operational performance, and:
- Be flexible and responsive to NDU's dynamic IT needs.

Execution of the task order (TO) shall provide innovative solutions by leveraging people, processes and technology to ensure a secure and reliable information exchange environment, improve efficiency, and provide flexibility in a dynamic environment that exceeds NDU customer expectations. Task order execution will ensure that the IT interface between NDU stakeholders is reliable, secure, and properly positioned to embrace new technologies and applications to maximize efficiency and reduce costs to the Government.

This is a performance-based TO under the Alliant GWAC. The contractor shall deliver creative and innovative solutions that meet the NDU objectives listed in Section C.3 of this PWS.

C.1.2 AGENCY MISSION

NDU's mission is to prepare and support leaders to think strategically and lead effectively across the range of national and international security challenges through interdisciplinary teaching, research, and outreach.

NDU provides strategic education through its five colleges: the College of International Security Affairs (CISA), Industrial College of the Armed Forces (ICAF), Information Resources Management College (iCollege), Joint Forces Staff College (JFSC), and National War College (NWC). NDU also began developing a program at the John F. Kennedy Special Warfare Center and School in Ft. Bragg, NC. The diversity in campuses allows the University to offer a variety of master's degrees, graduate certificates, and continuing education programs.

The Institute for National Strategic Studies (INSS) is the foundation for NDU's research functions. INSS currently includes the following components, Center for Complex Operations (CCO), Conflict Records Research Center (CRRC), Center for Strategic Conferences (CSC), Center for Strategic Research (CSR), Center for Technology and National Strategic Policy (CTNSP), and Center for Transatlantic Security Studies (CTSS). This division also includes NDU Press and the Center for Applied Strategic Learning (CASL).

There are a number of special activities and components that contribute to the NDU mission. These include the Capstone, Keystone and Pinnacle activities to prepare individuals for Joint Operations and the Center for Joint and Strategic Logistics (CJSL), the Center for the Study of Weapons of Mass Destruction (WMD Center), Joint Reserve Affairs Center (JRAC),

International Student Management Office (ISMO), and the Institute for National Security Ethics and Leadership (INSEL). In addition, NDU has partnerships with the Africa Center for Strategic Studies (ACSS), the Center for Hemispheric Defense Studies (CHDS) and Near East South Asia Center for Strategic Studies (NESA).

The NDU website www.ndu.edu provides additional information about NDU's mission and strategic vision, which the contractor shall review periodically. Mission statements of the NDU components are included in National Defense University Policy, CJCSI 1801.01C, published by the Joint Staff.

C.2 SCOPE

The NDU is seeking to obtain contractor support for NDU users and students to provide enterprise-wide IT services that encompass desktop and server operations and management services, e-mail and BlackBerry support, and storage, networking, and applications support. The scope also includes providing innovation and best practices to enhance and modernize the NDU IT infrastructure to improve reliability, the user experience, and increase efficiency. The contractor shall provide enterprise-wide IT services that meet the functional and technical needs of students, faculty, and NDU stakeholders worldwide. Section C.3 identifies objectives for the future NDU IT enterprise, which align with NDU's strategic vision for education and outreach for future leaders.

The NDU stakeholder community comprises all users supported by NDU, whether they are on campus, distance learning, or remote users. This community includes faculty, staff, and students currently consists of over 3000 personnel (faculty, staff and students) both onsite and remote, with the possibility of growth. The contractor shall provide technical support for government furnished systems (including workstations, notebooks, servers, cloud, wireless, and other IT related hardware).

C.3 OBJECTIVES

The overall outcomes of the NDU IT Enterprise Support Services task order are to:

- Provide consolidated IT enterprise services and support including reliable network availability, e-mail service; BlackBerry administration; IA services, integrated help desk; server administration and maintenance; systems engineering; network architecture planning; emerging technology research and implementation; and network operation and management based on Information Technology Infrastructure Library (ITIL®), Project Management Institute's Project Management Book of Common Knowledge (PMBOK®), and Lean Six Sigma.
- Ensure a high degree of customer focus and customer satisfaction, which provides a more
 efficient and effective use of resources throughout the NDU enterprise and strikes a balance
 between the efficiencies and standardization of centralized management and customer focus.
 This approach can be conceptualized as an architecture that provides the fusion between
 People, Processes, and Technology.

• Ensure minimum service disruption to vital Government business and no service degradation during and after TO transition.

The following are specific NDU IT Enterprise project objectives to achieve these outcomes:

(1) Provide highly effective and transparent program management that encompasses all of the stated objectives. The program management objective will promote effective, near real-time visibility of the objectives identified in this PWS, and promote effective communications and partnership between the Government and the contractor throughout the TO's period of performance. This includes the management and oversight of all activities performed by contractor personnel, including any subcontractors, to satisfy the requirements identified in this PWS.

Deliverables for this objective include Monthly Status Reports, Technical Status Meetings, Trip Reports, Problem Notification Reports, and Project Management Plans as identified in Section F.

- (2) Maximize IT system availability and connectivity
 - a. Ensure that NDU IT systems are available twenty-four hours a day, seven days a week, outside of pre-approved maintenance windows. NDU is a worldwide entity and has many distance learning, travel, and foreign students seeking NDU resources at all hours of the day.
 - b. Network reliability; as determined by user connectivity to the NDU network (TOR Attachment E provides the initial Operations Branch Service Level Agreements for Systems Administration Services and TOR Attachment D provides the initial service priority levels).
 - Reliability can best be summarized "as having network accessibility across the NDU
 enterprise at all times." This accessibility is required from work, home offices, and
 mobile sites, and is affected by the security constraints identified in Section C.5.1 of
 this PWS.
 - c. Have the best (e.g., >99.9%) connectivity during peak and off peak business operating hours in accordance with the contractor's awarded SLAs.
 - d. During a network connectivity failure, rapidly reestablish connectivity. Response to network outage will be measured in minutes, beginning with the time the outage is reported and ending at the time the outage has been eliminated.
 - e. Provide IT coverage and solutions for unplanned events and circumstances which can include changes in DoD directives, short term notice of special events, e.g., VIP visits which occur approximately three to four times annually, which may involve support outside of established business hours, implementation of emerging technologies to improve the operational environment, or responding to a major cyber-attack.
 - f. Manage and implement DoD IA tools in accordance with applicable DoD regulations, policies, and procedures, e.g., Host Based Security System (HBSS), firewalls, log collectors/analyzers (TOR Attachment F provides Library Systems objectives).

- g. Maintain and update a DoD compliant Standard Image for IT devices on the NDU network.
- (3) Provide NDU application integrity, relevance, and integration
 - a. Ensure that NDU has applications that always work as prescribed
 - b. Ensure that securely configured [Security Technical Implementation Guide (STIG) and Information Assurance Vulnerability Alert (IAVA) compliant] baseline images are developed and maintained for all NDU government-owned computing devices
 - c. Update applications on NDU systems in accordance with applicable vendor releases, and ensure they are securely configured in accordance with applicable DoD regulations (e.g. STIG and IAVA compliant)
 - d. Adapt existing applications/functionality to changing environmental requirements (e.g., DoD policies, new versions, and new business processes)
 - e. Provide support for the following (additional information provided in the TOR Attachments):
 - i. Existing student information system (DES)
 - ii. Existing web applications
 - iii. Existing SharePoint environment
 - iv. PeopleSoft Financial system
 - v. PeopleSoft Student Administration
 - vi. Administer Google cloud accounts and services

(4) Infrastructure modernization

- a. Review all NDU IT systems (except JFLC SIPRnet after 10 Nov. 2014) quarterly to seek improvements to ensure optimal performance from legacy systems.
- b. Explore and recommend for Government consideration innovative solutions and/or upgrades based on current/emerging technologies.
- Recommend system improvements from configuration changes to technology infusion/upgrades to reduce total cost or improve operational performance and/or reliability.
- d. Implement all approved technical solutions and manage the modernization effort from inception to production including all configuration documentation and updating the NDU Enterprise Architecture.
- e. Ensure that NDU IT systems optimize the NDU client operations and enhance the student learning experience.
- f. Characterize the NDU Target Architecture by a well-defined support organization, mature support processes, and well-engineered systems that effectively, efficiently, and securely meet NDU (and DoD) requirements. The objective is to effectively manage change and reduce related risks, measure service, and provide support in a predictable,

repeatable manner, allowing the Government to use performance-based services. The solution utilizes established business practice models, such as ITIL, to improve cost performance, improve configuration management, and allow NDU the ability to react to a challenging budgetary and evolving technology environment. The solution ensures all NDU infrastructure devices remain securely configured in accordance with applicable DoD regulations (e.g. STIG and IAVA compliant).

- g. Modernization project objectives include:
 - i. Windows 7 migration
 - ii. Consolidation / Management of Apple computers
 - iii. Infrastructure (Switches/Routers) review / re-engineering
 - iv. Quality of Service (QOS) review / re-engineering
 - v. Active Directory review / re-engineering
 - vi. Continuity of Operations review / implementation
 - vii. Student Information System (DES) updating
- (5) Provide Information Assurance Services
 - a. Maintain Authority to Operate (ATO) for all NDU enterprise enclaves and systems (except JFLC SIPRnet after 10 Nov. 2014)
 - i. Manage and perform all Certification and Accreditation (C&A) tasks for all NDU enclaves and systems (except JFLC SIPRnet after 10 Nov. 2014) in accordance with applicable DoD regulations and policies (e.g. DoDI 8510.0, DoDI 8500.2), including, but not limited to conducting initial C&A tasks, coordinating and supporting independent verification and validation activities, periodic review of security configurations, and providing site remediation and mitigation final reports to the NDU Chief Information Officer (CIO), the Designated Approving Authority (DAA)/Authorizing Official (AO), and the NDU Senior Information Assurance Officer (SIAO) that shall, with value added, support the development and implementation of overall IA mitigation strategies.
 - ii. Maintain a repository of C&A documentation for all NDU enclaves and systems (except JFLC SIPRnet after 10 Nov. 2014).
 - iii. Develop and maintain Plans of Action and Milestones (POA&M) to record the status of any corrective actions directed in association with accreditation decisions for all NDU enclave and systems (except JFLC SIPRnet after 10 Nov. 2014).
 - iv. Review all NDU enclave and system accreditation packages (except JFLC SIPRnet after 10 Nov. 2014) annually, or as required by the NDU SIAO, to confirm that the IA posture of the IS remains acceptable. Reviews will include validation of IA controls and be documented in writing.
 - v. Review policy and procedure changes [e.g. Certificates to Operate (CTOs), STIGs, Information Operations Conditions (INFOCONs), IAVA messages, and other DoD

- notifications], to determine the impact to NDU enclave and system accreditations and provide written impact assessments to the NDU SIAO.
- vi. Update the NDU Department of Defense Information Assurance Certification and Accreditation Process (DIACAP) manual based upon changes in DoD policies and regulations. The objective is to provide visibility of accreditation/authorization decisions regarding the operation of NDU enclaves and systems to ensure NDU enclaves and systems are operated in accordance with applicable DoD policies and regulations and to ensure the NDU DIACAP manual reflects the most current DoD guidance.
- b. Provide DIACAP liaison/action officer support services to Information Assurance Managers (IAMs), stakeholders, and system owners within NDU staff, colleges, research facilities, etc., for newly acquired systems or systems requiring reaccreditation (other than NDU enterprise enclave and system accreditations).
 - i. Review all DIACAP deliverables, plans of actions and milestones, and vulnerability scans to determine the security posture of the system requiring accreditation or reaccreditation. Perform final review of the DIACAP deliverables for completeness and accuracy to ensure they are ready for CA and DAA review. Coordinate collaboration meetings between stakeholders (e.g. NDU staff, colleges, research facilities, and system vendors). Ensure collaboration meeting minutes are developed and signed by the appropriate personnel to be used as artifacts for all DIACAP deliverables. Support other DIACAP objectives required by the NDU DAA, CA, and/or SIAO.
- c. TOR Attachment H provides additional IA objective details.
- (6) (OPTIONAL) Website Development (A) and Wargaming Support (B)
 - a. Create new web sites consistent with NDU's overall objective of having a standardized look and feel. Historically, 4-6 websites have been developed during the last three years.
 - b. Joint Forces Staff College (JFSC) Wargaming Support
 - i. Support the wargaming effort at JFSC (see TOR Attachment G)
 - ii. Current wargaming effort is confined to the JFSC campus.

(7) (OPTIONAL) Provide Sharepoint Support (C)

Provide Sharepoint support with the following objectives:

- a. Automate and increase the efficiency of business process, information management, and knowledge management.
- b. Provide a Single Entry Point with a consistent look and feel to further the "One University" paradigm.
- c. Improve collaboration between staff and faculty using Web 2.0 capabilities.
- d. Improve management and retention of organization knowledge and the ability for university components to "self-manage" content for their organizations.
- e. Provide Enterprise Records Management throughout the university that meets the goals and intent of DoDD 5015.2 and other applicable regulations such as educational accreditation requirements.

f. Provide a central location for business process automation tools that are currently provided through a host of disparate information systems.

C.4 TASKS

Each task decomposes the corresponding objective into the subtasks that the contractor shall perform to meet that objective, the deliverables that shall be provided, and the performance measures and acceptable quality levels (AQLs) that are associated with meeting that objective. For all tasks, the Performance Measures associated with the contractor SLAs are listed together with their AQLs. For Tasks 3, 4, 5 and 6, the criteria in the Task Order Award Fee Determination Plan are listed after the SLA-related performance measures.

C.4.1 TASK 1 – PROVIDE PROGRAM MANAGEMENT

The contractor shall provide program management support under this Task Order (TO). This includes the management and oversight of all activities performed by contractor personnel, including any subcontractors, to satisfy the requirements identified in this Performance Work Statement (PWS). The subtasks associated with Program Management are provided below. These subtasks are designed to maintain close coordination with the Government on all issues arising in the performance of all tasks and transparency of the status of all task activities, including financial tracking; to encourage communications between the contractor and the NDU task order management and to ensure that NDU students and researchers IT needs are promptly met.

Program management shall be based on ITIL® processes, the Project Management Institute's PMBOK®, and the principles of Lean Six Sigma. Program management shall include all areas defined by the PMBOK® (integration management, scope management, time management, cost management, quality management, human resource management, communications management, risk management, and procurement management).

Performance Standards and Quality Levels: The Performance Standards and Quality Levels for this task are provided in **Figure C-1**. These standards will be managed and monitored as described in the contractor's Service Level Agreement (SLA) and QASP responses to the TOR, as approved by the Government.

Figure C-1: Task 1 Performance Standards and Quality Levels.

Performance Standard	Acceptable Quality Level
Small Business Utilization: Total small business: 40% measured at the task order level	Target met 80% during any evaluation period and met 90% annually.
Timeliness of Responses to Government Communications: 100% of Government communications will be responded to within 8 business hours	90% of responses meet target
Suitability of Program Personnel: 100% of GD Team personnel possess appropriate certifications and security clearances at the time they begin work on NDU	100% of personnel meet target

Performance Standard	Acceptable Quality Level
Staff Retention: 80% of Key Personnel are retained	75% of target
(annually)	

Deliverables: Deliverables for this task are provided in **Figure C-2** and listed in Section F.5. The period of performance associated with these deliverables will be identified in the Project Management Plan. The contractor shall have provided the Transition-In Plan and Quality Assurance Surveillance Plan (QASP) in response to the TOR and shall revise these plans if required in coordination with the NDU after award.

Figure C-2: Task 1 Major Milestones and Deliverables.

Major Milestone/Deliverable	Planned Delivery Date
Project Start (PS)	At TOA
Project Kick-Off Meeting	Within 5 workdays of TOA
Copy of TO (initial award and all modifications)	Within 10 workdays of TOA
Monthly Status Report	Monthly (10th calendar day of the next month)
Technical Status Meetings	Monthly
Trip Reports	As Required Per Travel Authorization
Problem Notification Report	When Required
Final Award Fee Determination Plan	15 work days after TOA
Monthly Performance Report	Incorporated into the Monthly Status Report, Sections of the report are provided under the CLINs for Tasks 3 through 6
Exclusion Report	As required, within 5 work days of occurrence
Contractor Self-Evaluation	15 work days after the end of the Midterm Period and 15 work days after the end of the Full Period
Contractor Mitigation Letter and/or Contractor Conference	30 work days after the end of the Midterm Period, 35 days after the end of the Full Period, if desired or requested
Contractor Invoice	Determined by the contractor
Project Management Plan – Draft	NLT 5 workdays after Kick-Off Meeting and then yearly
Project Management Plan – Comments	5 workdays after Government receipt
Project Management Plan – Final	10 workdays after receipt of Government comments
Service Level Agreement Report	Monthly, included in the Monthly Status Report
Transition-In Plan	Initial Plan provided with contractor's proposal, updated as required
Transition-Out Plan	NLT 90 calendar days prior to the expiration of the TO

Major Milestone/Deliverable	Planned Delivery Date
Quality Assurance Surveillance Plan (QASP)	Initial Plan provided with contractor's proposal, updated as required

C.4.1.1 Subtask 1.1: Coordinate a Project Kickoff Meeting

The contractor shall coordinate a Project Kickoff Meeting within 5 days after award. The Project Kickoff Meeting is further described in Section C.5.3.

C.4.1.2 Subtask 1.2: Execute the Transition-In Plan

The contractor shall execute the Transition-in Plan provided with its response to the Task Order Request (TOR), in accordance with the requirements of Section C.5.3. As part of the execution of the Transition-In Plan, the contractor shall supply a copy of the Task Order and all modifications in accordance with Section F.5.5.

C.4.1.3 Subtask 1.3: Prepare Monthly Status Reports

The contractor shall provide a Monthly Status Report (MSR) covering all major activities performed during the preceding month, including TO financial status, in accordance with Section F.5.1. The MSR shall include the invoiced costs for each CLIN up to the previous month and the current month projected costs. The MSR shall also include the Service Level Agreement Report covering all tasks and the Monthly Performance Reports for Tasks 3 through six in order to provide a unified and transparent assessment of all aspects of TO performance.

C.4.1.4 Subtask 1.4: Hold Technical Status Meetings

The contractor shall hold technical status meetings monthly, to inform the NDU management of the status of technical activities within all tasks, as described in Section F.5.2.

C.4.1.5 Subtask 1.5: Provide Trip Reports

The contractor shall provide Trip Reports as required, as described in Section F.5.3.

C.4.1.6 Subtask 1.6: Provide Problem Notification Reports

The contractor shall provide Problem Notification Reports, as described in Section F.7, as soon as it becomes apparent that a scheduled delivery will be late.

C.4.1.7 Subtask 1.7: Manage the Award Fee Determination Process

The contractor shall manage the Award Fee Determination Process associated with Tasks 3, 4, 5 and (optionally) 6. In particular, the contractor shall participate in the process as required by Attachment V to the TOR for this task order. The contractor shall provide the following deliverables as part of this process: Award Fee Determination Plan, Monthly Performance

Reports (included in the Monthly Status Report), Contractor Self-Evaluations, Contractor Mitigation Letters, and Contractor Invoices.

C.4.1.8 Subtask 1.8: Provide and Maintain a Program Management Plan

The contractor shall provide and maintain a Program Management Plan (PMP). The PMP shall reflect the activities and the period of performance for each activity required under the TO.

C.4.1.9 Subtask 1.9: Manage Service Levels

The contractor shall manage service levels as described in their Service Level Agreements.

C.4.1.10 Subtask 1.10: Provide Financial Management and Tracking

The contractor shall provide financial management and tracking for all tasks and CLINs. Financial management shall include results from the Award Fee Determination Process and SLA performance.

C.4.1.11 Subtask 1.11: Maintain the People, Processes and Technology Base Needed to Meet NDU Objectives

The contractor shall maintain the people, processes, and technology base required to meet NDU objectives. The goal is to provide continuous improvement in responding to all NDU objectives.

C.4.1.12 Subtask 1.12: Prepare and Manage the Transition-Out Plan

The contractor shall prepare a Transition-Out Plan and manage the transition to the replacement contract so that NDU objectives continue to be met during the transition period.

C.4.2 TASK 2 – MAXIMIZE IT SYSTEM AVAILABILITY AND CONNECTIVITY

The contractor shall maximize the availability of NDU user connectivity to the NDU IT System. User connectivity shall be maximized by providing high availability of all elements of the IT infrastructure, including networks, e-mail, BlackBerrys, and servers, and a high level of NDU IT customer service support, including an integrated help desk. The contractor shall manage IA tools and maintain standard images for infrastructure elements. Current network infrastructure components are described in TOR Attachments B, C, and X. Support for modifications to the NDU IT infrastructure are provided under Task 4, Infrastructure Modernization. Once modifications have been accepted into the NDU IT system, the contractor shall support such modifications under this task. The contractor shall support the current services listed in the customer service catalog elements of TOR Attachment E. The contractor shall propose and, if accepted, incorporate changes to these services under Task 4. Such changes may be proposed both to improve service efficiency and effectiveness and to support change to the IT infrastructure. The contractor shall support such service changes, once accepted, under this task.

Performance Standards and Quality Levels: The Performance Standards and Quality Levels for this task are provided in **Figure C-3**. These standards will be managed and monitored as

described in the contractor's SLA and QASP responses to the TOR, as approved by the Government.

Figure C-3: Task 2 Performance Standards and Quality Levels.

Performance Standard	Acceptable Quality Level
Customer Satisfaction: ≥ 92%	Customer satisfaction > 80%
First Call Resolution: ≥ 65%	First call resolution > 50%
Return To Service: IT problem support (excluding audio/visual) for learning centers (i.e., classroom, auditorium, conference room, lecture hall) during academic hours and class/seminar in progress or within 2 business hours before start of class/seminar (NDU Priority 1): ≤ 1 business hour.	Average restoral time ≤ 1 business hour
Return To Service: IT problem support (excluding audio/visual) for learning centers (i.e., classroom, auditorium, conference room, lecture hall) that will be used in the near future during NDU normal operating business hours. Also isolated logon issues preventing users from accessing IT resources (NDU Priority 2): \leq 4 business hours	Average restoral time ≤ 4 business hours
Return to Service: IT problem support for key personnel (e.g., Command Group, Commandants, Directors, Deans and Executive Officers) \leq 4 business hours (NDU Priority 3)	Target met on 90% of the service outages.
Return to Service: Staff, Researcher and Student IT problem support ≤ 16 business hours (NDU Priority 4)	Target met on 90% of the service outages.
Moves, Adds, Changes (MACs): ≤ 5 bus. Days	Target met on 90% of MACs.
LAN Availability ≥ 99.9%	LAN availability ≥ 99.5%
Scheduled recovery success ≥ 99.5%	Scheduled recovery success ≥ 99%
Email Availability ≥ 99.9%	Email availability ≥99.5%
Data backup ≥ 99.5%	Data backup ≥ 99%
Enterprise SAN Availability ≥ 99.95%	Enterprise SAN Availability ≥ 99.85%

Deliverables: Deliverables for this task are provided in **Figure C-4** and listed in Section F.5. The period of performance associated with these deliverables will be identified in the Project Management Plan.

Figure C-4: Task 2 Major Milestones and Deliverables.

Major Milestone/Deliverable	Planned Delivery Date
Customer Service and Help Desk Report	Monthly

C.4.2.1 Subtask 2.1: Operate and Maintain a High Availability NDU Network

The contractor shall ensure that NDU IT systems are available twenty-four hours a day, seven days a week, outside of pre-approved maintenance windows and Authorized Service Interruptions (ASIs). NDU is a worldwide entity and has many distance learning, travel, and foreign students seeking NDU resources at all hours of the day. This environment requires attention to not just the wired local area network, but to the extensive local wireless and remote wired and wireless capabilities as well. The contractor shall operate and maintain all elements of the local wired and wireless environment and shall monitor the connectivity of non-local elements of the network and suggest improvements as needed to non-local components. Elements of the local wired and wireless environment include routers, switches, Wireless Access Points, local wiring and terminations, and all other components identified by the Government in TOR Attachments B, C and X or elsewhere in the TOR or added to the site inventory during TO execution. In the event of connectivity failures due to the failure of local infrastructure elements, the contractor shall rapidly reestablish connectivity. The contractor shall also actively cooperate with the providers of non-local elements of connectivity in analyzing the causes of connectivity loss and in restoring connectivity when external elements are responsible for the loss of connectivity.

C.4.2.2 Subtask 2.2: Maintain E-Mail Service

The contractor shall maintain and monitor E-Mail service, including both local and non-local components, including E-Mail service provided via the Google cloud. To the extent required, the contractor shall manage the transition of student e-mail accounts from the Microsoft Exchange internal server environment to the Google cloud.

C.4.2.3 Subtask 2.3: Administer NDU BlackBerrys

The contractor shall administer NDU-provided BlackBerrys as required, including the security environment. BlackBerry management shall include management of the Blackberry servers and administrative and security support functions associated with those servers, including license management.

C.4.2.4 Subtask 2.4: Provide NDU IT Customer Service, including an Integrated Help Desk

The contractor shall provide NDU IT Customer Service, including an integrated help desk to respond to NDU user problems with any of the areas covered by the tasks in this PWS, including network problems (including network connectivity to Audio/Visual equipment), end user IT equipment problems (for NDU provided equipment) and change requests, application problems, information assurance problems, web site problems and wargaming problems. The Help Desk shall be the hub for all Customer Service support functions, as described in TOR Attachment E. The help desk shall address Tier 1 and Tier 2 problems and coordinate with the appropriate hardware vendor or software provider experts to track the resolution of Tier 3 problems. Full Customer Service support hours shall be as specified in the TOR Attachment E (0600 – 1800, Monday – Friday), and for periods of coverage for unplanned events and circumstances,

described below in Subtask 2.6, that are anticipated to occur 3 to 4 times per year. Outside of these hours, the contractor shall provide on-call support to respond to critical problems.

C.4.2.5 Subtask 2.5: Provide Server Administration and Maintenance

The contractor shall administer and maintain the NDU Servers. This includes maintaining lifecycle care, including backup of data and support for replacement servers as listed in TOR Attachment F (Library System Objectives), and other server support functions as listed in TOR Attachment E. In addition to backups and server replacement support, TOR Attachment E functions include server installation and set-up; application of firmware patches to ensure compliance with DoD, Army and NDU standards; capacity, performance, configuration and security monitoring; collecting and reporting on performance metrics; and device authentication, authorization and accounting. The contractor shall also administer and maintain virtual servers as they are implemented. Security support functions for the servers (beyond those involved in normal operations and listed in TOR Attachment E) will be performed under Task 6.

C.4.2.6 Subtask 2.6: Provide IT Coverage for Unplanned Events and Circumstances

The contractor shall provide IT coverage for unplanned events. The NDU estimate for such events is that VIP visits to the NDU main campus occur 3 to 4 times per year and that IT support is needed for those events, including potentially outside of established business hours. In addition, the contractor shall support implementation of emerging technologies in the operational environment and respond to major cyber-attacks or other unexpected events potentially causing service disruptions.

C.4.2.7 Subtask 2.7: Manage and Implement IA Tools

The contractor shall manage and implement IA tools in accordance with DoD regulations, policies, and procedures. These tools include the HBSS, firewalls, log collectors and analyzers, and Retina.

C.4.2.8 Subtask 2.8: Maintain and Update a Standard Image

The contractor shall maintain and update DoD compliant Standard Images for IT devices on the NDU network. This includes providing required patches to all NDU Government-issued devices authorized for use on the wireless network.

C.4.3 TASK 3 – PROVIDE NDU APPLICATION INTEGRITY, RELEVANCE AND INTEGRATION

The contractor shall provide NDU Application Integrity, Relevance, and Integration. This includes ensuring correct applications performance, maintaining application configurations, adapting applications to changing environmental conditions and providing support for designated applications.

Performance Standards and Quality Levels: The Performance Standards and Quality Levels for this task are provided in **Figure C-5**. These standards will be managed and monitored as

described in the Award Fee Determination Plan and in the contractor's SLA and QASP responses to the TOR, as approved by the Government.

Figure C-5: Task 3 Performance Standards and Acceptable Quality Levels.

Performance Standard	Acceptable Quality Level
Application Hosting Availability ≥ 99.9% for SharePoint, DES v1, DES v2, EADP, Coldfusion (Web), Remedy, and PeopleSoft Financials	Application Hosting Availability ≥ 99.5%
Network Applications operate as described ≥ 99.5%	Network Applications operate as described ≥ 99.5%
Ensure that 100% of applications are securely configured and baseline images are maintained for all NDU government-owned computer devices except noted systems	Targets met ≥ 99.5%
Update NDU applications in accordance with DoD regulations	Targets met > 95%
Student administration system (DES), existing web applications, SharePoint, PeopleSoft Financial System and Student Administration; Google cloud accounts and services are available ≥ 99.5%	Applications operate as described ≥ 99%

Deliverables: Deliverables for this task are provided in **Figure C-6** and listed in Section F.5. The period of performance associated with these deliverables will be identified in the Project Management Plan.

Figure C-6: Task 3 Major Milestones and Deliverables.

Major Milestone/Deliverable	Planned Delivery Date
Applications Support and Enhancement Section of the Monthly Performance Report	Monthly, included in the Monthly Status Report
Ad-hoc Applications Support and Enhancement Deliverables	When required

C.4.3.1 Subtask 3.1: Ensure Correct Application Performance

The contractor shall ensure that all NDU GFE/COTS/GOTS applications are installed, configured, and patched according to the vendor/developers guidance enabling their respective prescribed performance. In the event that properly installed applications do not operate correctly, the contractor shall work with the application developer or maintainer to establish correct performance.

C.4.3.2 Subtask 3.2: Maintain Application Configurations

The contractor shall ensure that baseline images are developed and maintained for all NDU government-owned computing devices. These images shall be securely configured; that is, they shall be compliant with the STIG and IAVAs.

C.4.3.3 Subtask 3.3: Adapt Applications to Changing Environmental Conditions

The contractor shall adapt applications to changing environmental conditions. The NDU IT environment is constantly changing, due to infrastructure equipment changes, user equipment changes (including the move to Bring Your Own Device (BYOD) in the realm of student applications), security threats and tools to minimize them, changes in system load and other changes outside the direct control of NDU. The contractor shall monitor the changed environment and maintain correct application performance within the changing environment.

C.4.3.4 Subtask 3.4: Provide Support for Designated Applications

The contractor shall provide support for the following applications: The existing student information system (DES), existing web applications, existing SharePoint environment, PeopleSoft Financial system, PeopleSoft Student Administration system. The contractor shall provide support for and administer Google cloud accounts and services.

C.4.4 TASK 4 – SUPPORT INFRASTRUCTURE MODERNIZATION

The contractor shall support NDU Infrastructure Modernization. This includes providing network architecture planning, researching developments in emerging infrastructure technology, implementing appropriate new infrastructure technology, optimizing NDU IT systems for client operations and student learning, maintaining and moving toward the evolving NDU target architecture and implementing selected modernization projects.

Performance Standards and Quality Levels: The Performance Standards and Quality Levels for this task are provided in **Figure C** 7. These standards will be managed and monitored as described in the Award Fee Determination Plan and in the contractor's Service Level Agreement (SLA) and QASP responses to the Task Order, as approved by the Government.

Figure C 7: Task 4 Performance Standards and Acceptable Quality Levels.

Performance Standard	Acceptable Quality Level
Customer Satisfaction with Emerging Technology Support: 80% or greater ranking at Very Good or above on a 5-point scale (e.g., Excellent, Very Good, Satisfactory, Needs Improvement, Unacceptable)	Customer satisfaction 80%
Customer Satisfaction with Emerging Technology Integration: 80% or greater ranking at Very Good or above on a 5-point scale (e.g., Excellent, Very Good, Satisfactory, Needs Improvement, Unacceptable)	Customer satisfaction 80%
100% of NDU IT systems are reviewed quarterly and improvements identified to ensure optimal performance from legacy systems	> 90% of NDU IT Systems are reviewed quarterly; Quarterly reviews are completed within 4 months of previous review
Customer satisfaction with the extent to which the Contractor investigated and proposed for Government consideration innovative solutions and/or upgrades to the existing IT infrastructure based on current/emerging technologies 80% or greater ranking at Very Good or above on a 5-point scale (e.g.,	Customer satisfaction 80%

Excellent, Very Good, Satisfactory, Needs Improvement, Unacceptable)	
Customer satisfaction with the quality of Contractor implemented Government-approved technical solutions and the management of IT modernization to include preparing system configuration documentation and updating the NDU Enterprise Architecture 80% or greater ranking at Very Good or above on a 5-point scale (e.g., Excellent, Very Good, Satisfactory, Needs Improvement,	Customer satisfaction 80%
Customer satisfaction with the degree to which the Contractor's modernization optimized NDU client operations and enhanced the student learning experience 80% or greater ranking at Very Good or above on a 5-point scale (e.g., Excellent, Very Good, Satisfactory, Needs Improvement, Unacceptable)	Customer satisfaction 80%
100% of NDU infrastructure devices are securely configured within the time constraints of the applicable notice or order in accordance with applicable DoD regulations (e.g., STIG and IAVA compliant).	Target met for 99% of devices
Customer satisfaction with the quality of Contractor planning and implementation of infrastructure modernization projects, review and implementation 80% or greater ranking at Very Good or above on a 5-point scale (e.g., Excellent, Very Good, Satisfactory, Needs Improvement, Unacceptable)	Customer satisfaction 80%

Deliverables: Deliverables for this task are provided in **Figure C-8** and listed in Section F.5. The period of performance associated with these deliverables will be identified in the Project Management Plan.

Figure C-8: Task 4 Major Milestones and Deliverables.

1 1gure C of 1 ush 1 1/1 ujor 1/1 mestories una Den ferusies.	
Major Milestone/Deliverable	Planned Delivery Date
Infrastructure Modernization Section of the Monthly Performance Report	Monthly, included in the Monthly Status Report
NDU Enterprise Architecture Updates	When required
Other Infrastructure Modernization Deliverables	When required

C.4.4.1 Subtask 4.1: Review NDU IT Systems for potential improvements

The contractor shall review all NDU IT systems (except JFLC SIPRnet after 10 Nov. 2014) quarterly to seek improvements to ensure optimal performance from legacy systems.

C.4.4.2 Subtask 4.2: Explore and Recommend Innovative IT Solutions and Upgrades

The contractor shall explore and recommend for Government consideration innovative solutions and upgrades based on current and emerging technologies.

C.4.4.3 Subtask 4.3: Recommend System Improvements

The contractor shall recommend system improvements that reduce total cost or improve operational performance or reliability. Such improvements may include configuration changes,

upgrading of existing technology and infusion of new technology, including hardware, software, and processes.

C.4.4.4 Subtask 4.4: Implement Technical Solutions

The contractor shall implement all approved technical solutions. The contractor shall manage these modernization efforts from the inception of the effort through production and full operational capability of the technical solution, including all configuration documentation and updating the NDU Enterprise Architecture.

C.4.4.5 Subtask 4.5: Optimize NDU Client Operations and Student Learning

The contractor shall consider NDU IT systems within the broader context of the NDU client operations and student learning that they support in order to identify sub-optimal elements of systems within that context and shall optimize the elements that are identified. Process changes may be an element of the optimized system improvements. As permitted by the Government, the contractor will actively seek out suggestions from the client community, including the NDU staff, faculty, and students, for examples of sub-optimal elements of the NDU IT systems that can be optimized.

C.4.4.6 Subtask 4.6: Maintain and Move toward the NDU Target Architecture

The contractor shall characterize the NDU Target Architecture and its key elements, both as an initial target, based on the contractor's well-defined support organization, mature support processes, and the contractor's knowledge of well-engineered systems. These systems shall effectively, efficiently, and securely meet NDU (and DoD) requirements. The Target Architecture will evolve and will reflect the best business practice models available, such as ITIL and Lean Six Sigma, to improve IT cost performance. The resulting architecture will be a tool to effectively manage change, reduce related risks, and be designed to provide support in a predictable, repeatable manner. The evolving NDU Target Architecture shall ensure that all infrastructure devices shall remain securely configured in accordance with applicable DoD regulations.

C.4.4.7 Subtask 4.7: Implement Modernization Projects

The contractor shall implement ongoing and planned infrastructure modernization projects, including Windows 7 migration, the consolidation and management of Apple computers, Infrastructure (Switches and Routers) review and re-engineering, Quality of Service (QOS) review and engineering, Active Directory review and re-engineering, Continuity of Operations review and implementation, and Student Information System (DES) updating.

C.4.4.8 Subtask 4.7: Provide Enterprise Architecture Program Assistance

The National Defense University seeks to establish an Enterprise Architecture (EA) program to allow for educated decision making and help shape the future modernization and technical planning.

The contractor shall work with NDU to identify where the NDU is today from an EA perspective, where they want to be, and the steps to get there. Based on this planning, this enables ITD to continue their future planning for EA at NDU.

This subtask will focus on developing the EA charter and plan. The Charter will outline the steps necessary to establish an EA program for NDU. The contractor shall also recommend tools that can be used in the gathering, synthesizing, analyzing, and presenting of the architecture views that will be developed.

This subtask will establish the EA program and begin to map the architecture starting with the Library systems.

Deliverables include the Charter and initial Library system discovery documents:

The Charter shall include the following:

Title	Description
Overview and Summary	Describes, in a text document, the scope, vision, goals, objectives, and stakeholders for the architecture.
Integrated Dictionary	A table that contains definitions for architecture elements.
EA Architecture Program Plan	Describes, in a text document, the roadmap for setting up the NDU Enterprise Architecture Program.
EA Tool Options	Outlines the pros and cons of industry standard EA tools that have the potential to support the NDU EA Program and makes a recommendation for a tool(s) for NDU use.

Library documents:

Title	Description
Systems Interface Description	A diagram depicting the system / service nodes, system / service entities and their interfaces, within and between nodes.
Systems Resource Flow Description	Specifies the System Resource Flows between Systems and may also list the protocol stacks used in connections. Consists of systems, their ports, and the resource flows between those ports.
Systems Functionality Description	Depicts high-level services, system functions, external data sources, repositories and the data flows between them. Logical groupings of the services, functions and repositories are represented to inform functionality allocation to physical systems.
Systems Evolution Description	The planned incremental steps toward migrating a suite of systems to a more efficient suite, or toward evolving a current system to a future implementation.

As the program is established, the contractor shall help shape the future of the program and recommend, using their expertise, other deliverables and methodologies to create a useful and productive program.

The contractor shall also recommend tools to establish a long term, sustainable EA model.

Deliverables: Deliverables for this task are provided in Figure 8A and listed in Section F.5. The period of performance associated with these deliverables will be identified in the Project Management Plan.

Figure C-8A: Task 6 Major Milestones and Deliverables.

Major Milestone/Deliverable	Planned Delivery Date
Enterprise Architecture Charter Document	30 work days after TOA
Library Systems Interface Description	As indicated in EA Charter document
Library Systems Resource Flow Description	As indicated in EA Charter document
Library Systems Functionality Description	As indicated in EA Charter document
Library Systems Evolution Description	As indicated in EA Charter document

C.4.5 TASK 5 – PROVIDE INFORMATION ASSURANCE (IA) SERVICES

The contractor shall provide IA services. These include providing IA program management, providing policy support, maintaining Authorities to Operate (ATOs), supporting C&A activities, providing DIACAP liaison and action officer support services, reviewing new technology, operating and maintaining the Security Awareness Program, managing information security vulnerabilities and responding to security incidents, providing NDU IT system defenses (including computer network defense, the Host Based Security System and the anti-virus program) and providing technical threat guidance.

Performance Standards and Quality Levels: The Performance Standards and Quality Levels for this task are provided in Figure C-9. These standards will be managed and monitored as described in the Award Fee Determination Plan and in the contractor's SLA and QASP responses to the Task Order, as approved by the Government.

Figure C-9: Task 5 Performance Standards and Acceptable Quality Levels.

Performance Standard	Acceptable Quality Level
Vulnerability Management System (VMS) Maintenance - Registration and management of assets, vulnerability tracking and record of compliance.	After initial population of VMS, changes to assets maintained within 30 days of changes. Vulnerable systems are applied with required patches. For patch management, 98% of available systems patched according to IAVM.
Accreditation – update and maintain the artifacts necessary to retain and maintain the accreditation of the NDU network.	Maintenance of artifacts for accreditation package.
IAVAs deployed within time constraints of the applicable DISA order/notice.	Target met 90%

Deliverables: Deliverables for this task are provided in **Figure C-10** and listed in Section F.5. The period of performance associated with these deliverables will be identified in the Project Management Plan.

Figure C-10: Task 5 Major Milestones and Deliverables.

Major Milestone/Deliverable	Planned Delivery Date
Authority to Operate and Information Assurance Section of the Monthly Performance Report	Monthly, included in the Monthly Status Report
Site Remediation and Mitigation Report	When required
Plans of Action and Milestone (POA&M)	When required
Report on NDU Enclave and System Accreditation Packages	Annually or when required by the NDU SIAO
Report on Policy and Procedure Changes	When required
Updated NDU DoD IA Certification and Accreditation (C&A) Process (DIACAP) Manual and other C&A Documentation Highlight Reports	When required by changes to DoD and other policies and regulations.
	Weekly
Monthly IA Report	Monthly, included in the Monthly Status Report
Ad-hoc Authority to Operate and Information Assurance Reports	When required

C.4.5.1 Subtask 5.1: Provide IA Program Management and Policy Support

The contractor shall provide IA program management. Specifically, the IA contractor shall administer and coordinate the NDU IA program, maintain documentation of NDU systems and their compliance with DoD directives, and prepare weekly highlights, and monthly and ad-hoc reports for the NDU Senior Information Security Officer (SIAO). The contractor shall support IA policy creation and development by ensuring that all policies required by DoD are written and signed and by developing and writing new draft policies as required for NDU review and action.

C.4.5.2 Subtask 5.2: Maintain Authority to Operate and Support Certification and Accreditation

The contractor shall maintain the ATO for and support C&A of all NDU enterprise enclaves and IT systems (except JFLC SIPRnet after 10 Nov. 2014). Specifically, the contractor shall:

• Manage and perform all C&A tasks for all NDU enclaves and systems (except JFLC SIPRnet after 10 Nov. 2014) in accordance with applicable DoD regulations and policies (e.g. DoDI 8510.0, DoDI 8500.2), including, but not limited to conducting initial C&A tasks, coordinating and supporting independent verification and validation activities, periodic review of security configurations, and providing site remediation and mitigation final reports to the NDU CIO, the Designated Approving Authority (DAA)/Authorizing Official (AO), and the NDU SIAO that shall, with value added, support the development and implementation of overall IA mitigation strategies.

- Maintain a repository of certification and accreditation documentation for all NDU enclaves and systems (except JFLC SIPRnet after 10 Nov. 2014).
- Develop and maintain POA&Ms to record the status of any corrective actions directed in association with accreditation decisions for all NDU enclave and systems (except JFLC SIPRnet after 10 Nov. 2014).
- Review all NDU enclave and system accreditation packages (except JFLC SIPRnet after 10 Nov. 2014) annually, or as required by the NDU SIAO, to confirm that the IA posture of the IS remains acceptable. Reviews will include validation of IA controls and be documented in writing.
- Review policy and procedure changes [e.g. CTOs, STIGs, INFOCONs, IAVA messages, and other DoD notifications], which occur to determine the impact to NDU enclave and system accreditations and provide written impact assessments to the NDU SIAO.
- Update the NDU DIACAP manual based upon changes in DoD policies and regulations. The
 objective is provide visibility of accreditation/authorization decisions regarding the operation
 of NDU enclaves and systems to ensure NDU enclaves and systems are operated in
 accordance with applicable DoD policies and regulations and to ensure the NDU DIACAP
 manual reflects the most current DoD guidance.

C.4.5.3 Subtask 5.3: Provide DIACAP Liaison/Action Officer Support Services

The contractor shall provide DIACAP liaison/action officer support services to IAMs, stakeholders, and system owners within NDU staff, colleges, research facilities, etc., for newly acquired systems or systems requiring reaccreditation (other than NDU enterprise enclave and system accreditations).

The contractor shall:

- Review all DIACAP deliverables, plans of actions and milestones, and vulnerability scans to determine the security posture of the system requiring accreditation or re-accreditation.
- Perform final review of the DIACAP deliverables for completeness and accuracy to ensure they are ready for CA and DAA review.
- Coordinate collaboration meetings between stakeholders (e.g. NDU staff, colleges, research facilities, and system vendors).
- Ensure collaboration meeting minutes are developed and signed by the appropriate personnel to be used as artifacts for all DIACAP deliverables.
- Support other DIACAP objectives required by the NDU DAA, CA, and/or SIAO.

C.4.5.4 Subtask 5.4: Review New IA Technology

The contractor shall review new IA technology, evaluating new capabilities for secure use on the NDU network and coordinating external network connection approvals for new technology incorporated into the NDU network.

C.4.5.5 Subtask 5.5: Operate and Maintain the Security Awareness Program

The contractor shall operate and maintain the Security Awareness Program. Specifically, the contractor shall:

- Maintain up to date security awareness program to provide annual training to users
- Prepare and provide IT security-related briefings to NDU clients
- Provide regular tips and reminders to NDU clients
- Ensure account creation and management aligns with IAA training requirements

C.4.5.6 Subtask 5.6: Manage Information Assurance Vulnerabilities

The contractor shall perform all required Information Assurance Vulnerability Management (IAVM) functions. Specifically, the contractor shall:

- Manage compliance reporting to ensure that IAVM notifications are acknowledged, corrective actions are implemented, extensions are requested with adequate justifications, compliance is verified, and reporting data is entered in the required database/system (e.g. VMS). As part of managing compliance reporting, the contractor shall develop, maintain, and manage the NDU organizational and asset structure within VMS; report IAVMs in VMS; submit and conduct a weekly review all IAVM POA&Ms for all non-compliant assets; and update VMS when changes are implemented.
- Apply applicable IA controls to all NDU network (e.g. routers, switches, etc.) and computer
 resources (e.g. laptops, desktops, servers, etc.) (except JFLC SIPRnet after 10 Nov. 2014)
 and perform monthly scans of all NDU network resources (except JFLC SIPRnet after 10
 Nov. 2014). Apply applicable IA controls to all NDU Government-issued devices authorized
 for use on the wireless network.
- Perform scans of all NDU network and computer resources (except JFLC SIPRnet after 10 Nov. 2014). This includes: conducting monthly scans using the Retina "All Audits" definition file (or comparable scan with the current DOD- approved vulnerability scanning tool); conducting vulnerability scans following weekly maintenance/remediation efforts to determine the effectiveness of those efforts and plan subsequent remediation activities; conducting compliance scanning and complete vulnerability scans using approved tools of all NDU networking and computer resources (except JFLC SIPRnet after 10 Nov. 2014); conduct vulnerability remediation scanning as directed within IAVM messages; providing IAVM compliance reporting and verification support; proactively maintaining, patching, or updating all network and computer resources prior to the required IAVM mitigation dates to prevent exploitation; and performing STIG assessment and vulnerability scans using DOD approved tools on all newly configured/imaged systems to ensure compliance with applicable STIGS and IAVM messages prior to placing the systems on NDU networks.

C.4.5.7 Subtask 5.7: Respond to Security Incidents

The contractor shall respond to and handle security incidents. The contractor shall immediately respond to incidents and apply the necessary controls; document, monitor, analyze and respond to any security incidents; coordinate response activities with the Computer Incident Response Team; review and update NDU Incident Response procedures; and maintain a tracking log for all security incidents.

C.4.5.8 Subtask 5.8: Operate and Maintain NDU IT System Defenses - Computer Network Defense and the NDU Anti-Virus Program

The contractor shall operate and maintain NDU IT system defenses, including computer network defense, the HBSS, and the NDU Anti-Virus program.

Computer Network Defense

The contractor shall provide computer network defense primarily by means of the HBBS. Specifically, the contractor shall:

- Provide Host Intrusion Prevention System (HIPS) management and updates for enterprise managed assets and workstations
- Provide host-based firewall management for enterprise-management assets and workstations
- Provide success or failure information and reports about HIPS, Anti-Virus (AV), and other agents deployed and managed
- Determine abnormalities, attacks, damages, and unauthorized modification in the network via mechanisms such as intrusion detection devices
- Perform system administration on HBSS to include installation, configuration, and maintenance
- Manage and administer the updating of rules and signatures, including whitelisting and blacklisting of applications
- Install, manage, maintain, and configure the HBSS and associated modules
- Develop and maintain documentation for all HBSS changes and exceptions
- Provide monthly HBSS change and exception reports to the NDU SIAO.

Anti-Virus Program

The contractor shall ensure that the NDU network is protected with an effective, current antivirus program and shall develop and establish effective procedures for cleansing systems.

C.4.5.9 Subtask 5.9: Provide Technical Threat Guidance

The contractor shall provide Technical Threat Guidance. Specifically, the contractor shall:

- Develop technical guidance and courses of action to mitigate current and future threats
- Detect and report malicious and unauthorized activities
- Gather relevant security events information (e.g. intrusion) from monitored external sources managed network devices, such as network guards, firewalls, systems that ensure emissions security, communications, computer security, and information systems
- Conduct research analysis to assess known or potential threats to all computer system and network assets
- Review and analyze intelligence products and provide operational assessments to defend the network

 Conduct analysis of malicious events and known exploits/vulnerabilities for the creation of custom signatures rule sets for the accompanying modules Security Information and Event Management (SIEM)

C.4.6 TASK 6 – PROVIDE WEBSITE DEVELOPMENT AND WARGAMING SUPPORT (OPTIONAL)

Optionally, the contractor shall create new web sites with a standardized look and feel consistent with the then-current NDU websites.

Optionally, the contractor shall provide wargaming support to the Joint Forces Staff College (JFSC).

Performance Standards and Quality Levels: The Performance Standards and Quality Levels for this task are provided in **Figure C-11**. These standards will be managed and monitored as described in the Award Fee Determination Plan and in the contractor's SLA and QASP responses to the Task Order, as approved by the Government.

Figure C-11: Task 6 Performance Standards and Acceptable Quality Levels.

Performance Standard	Acceptable Quality Level
Wargaming Application availability: ≥ 99.9%	Application Availability ≥ 99.5%
Webserver availability: ≥ 99.9%	Application Availability ≥ 99.5%
Customer Satisfaction with the quality of the Contractor review of current NDU websites, and of Contractor creation of web sites that are consistent and have a standardized look and feel 80% or greater ranking at Very Good or above on a 5-point scale (e.g., Excellent, Very Good, Satisfactory, Needs Improvement, Unacceptable)	Customer satisfaction 60%
Customer satisfaction with the quality and timeliness of Contractor provided support for the wargaming efforts at JFSC 80% or greater ranking at Very Good or above on a 5-point scale (e.g., Excellent, Very Good, Satisfactory, Needs Improvement, Unacceptable)	Customer satisfaction 60%

Deliverables: Deliverables for this task are provided in **Figure C-12** and listed in Section F.5. The period of performance associated with these deliverables will be identified in the Project Management Plan.

Figure C-12: Task 6 Major Milestones and Deliverables.

Major Milestone/Deliverable	Planned Delivery Date		
Website and Wargaming Support Section of the Monthly Performance Report	Monthly, included in the Monthly Status Report		
New Websites	When required		
Simulation Software Documentation	When required		
Web Site Development and Wargaming Support	When required		

C.4.6.1 Subtask 6.1: Create New Websites (Option)

The contractor shall create new web sites with a standardized look and feel consistent with convergence of the NDU websites to this standard. Historically, the NDU has developed between 4 and 6 websites in the last 3 years.

C.4.6.2 Subtask 6.2: Provide Joint Forces Staff College (JFSC) Wargaming Support (Option)

The contractor shall provide wargaming support to the Joint Forces Staff College (JFSC). Specifically, the contractor shall:

- Provide wargaming modeling & simulation applications maintenance by designing and developing modifications to GIS, C2, and C4I applications with the appropriate software language (C++, C#, .NET framework) for use with JFSC wargaming applications; conducting simulation software functional, regression, and unit testing; providing simulation software documentation and providing simulation user manuals for game directors, technical controllers and student exercise participants. The application developers shall provide maintenance to the wargaming suite of applications including but not limited to modifications to third party and GOTS software.
- Provide scenario development support to JFSC curriculum exercises and wargames by
 conducting research and providing exercise injects for homeland security, humanitarian
 assistance/disaster relief and major combat operations scenarios; conducting research and
 provide changes to force structure and equipment changes to US, coalition and opposing
 forces used during JFSC wargames.
- Provide support to the logistics curriculum (deployment, employment, sustainment, and redeployment) by maintaining liaison with USTRANSCOM for JFAST version changes.
 Provide integration testing to JFSC wargaming software baseline; maintaining the JFAST content repository; providing JFAST training to faculty and students; and providing support for developing software tools that enhance the education of deployment, employment sustainment, and redeployment of forces at the operational level.
- Provide simulation technical control during JFSC wargames by providing exercise technical
 controllers for JFSC curriculum supporting wargames (This includes pre-exercise
 coordination with the supported faculty, wargaming suite preparation, operating simulations
 and C4I systems, assisting students with wargaming tools) and by providing constructive
 after action recommendations for technical improvements to the wargaming processes.

C.4.7 TASK 7 – PROVIDE SHAREPOINT SUPPORT (OPTIONAL)

Optionally, the contractor shall provide Sharepoint support to the NDU Ft. McNair campus.

This task includes, but is not limited to, Sharepoint-related business process engineering/reengineering, records management implementation, building Sharepoint dashboards and related objects, converting existing forms, providing hands-on content managers training, along with software and web design, development, testing and implementation to provide the NDU with modern, professional, and a high performing SharePoint solution to advance their capabilities to

find, retain, share, and collaborate on knowledge for use in all facets of conducting university business. In addition, the contractor shall support system of systems engineering initiatives to include creating business process workflows to ensure that the resulting product is fully integrated across the enterprise with related NDU and DoD systems such as Active Directory Services, Blackboard, EZ Proxy, and external data repositories.

Specifically, the contractor shall:

Provide all necessary, materials, technical data, and non-personal services associated with the development, design, testing, deployment, and training to support NDU's KM and Collaboration initiative as outlined within this Performance Work Statement (PWS) except for those items specified as Government furnished property and services. The contractor shall perform to the standards of this task order including providing personnel who meet the requirements set forth in DODD 8570 and DOD 5200 series documents.

The following are specific tasks to achieve the objectives:

- (1.) Implement enterprise-wide Records Management taxonomy, workflows, retention policies, batch uploads to Joint Staff office.
- (2.) Implement enterprise-wide operational calendar (non-academic), and integrate with logistics, protocol, facilities, and resource reservation workflows and forms.
- (3.) Convert existing PDF- and SQL-based forms into Infopath forms with workflows and reports.
- (4.) Create graphic dashboards for staffing actions, communications/outreach, logistics/facilities service requests.
- (5.) Create business process workflows for use across the enterprise and integrate to the extent possible with other NDU systems and applications.
- (6.) Finalize Active Directory (AD) integration with SharePoint. Based on Active Directory configure SharePoint permissions such that portals, links, tabs, and search returns (including R: Drive returns) are permissions-based.
- (7.) Integrate Active Directory-based personnel directories into each component template.
- (8.) Create a process to track approval of SF182 training requests such that the training requestor or any approval authority in the process would know where the request stands.
- (9.) Create a process for tracking credit card purchases such that any person could see from submission to delivery, where a purchase request stands.
- (10.) Provide SharePoint Content Managers with additional hands-on training to bring them to a minimum level of proficiency that includes the following skills:
 - i. Create a Web Part using SharePoint's preset templates.
 - ii. Create a Web Page using SharePoint's preset templates.
 - iii. Customize the layout of a Web Page.
 - iv. Add Web Parts to a Web Page.
 - v. Filter rendered/returned content according to Active Directory permissions.
 - vi. Create custom list/library views.
 - vii. Edit global and current navigation for their portal.
 - viii. Create and structure SharePoint libraries of various types (documents, links, media).
 - ix. Add media to a Web Page.

- x. Create an InfoPath form.
- xi. Create and Manage workflows.
- xii. Create and request analytic reports.
- xiii. Create folksonomies for their component to use in tagging proprietary work.
- xiv. Integrate SharePoint with other Microsoft products (esp Outlook)
- xv. Create and manage Content Types.
- xvi. Create collaborative Sites using SharePoint meeting, blog, and team site templates.

C.5 CONSTRAINTS

The following constraints are incorporated in this PWS.

C.5.1 SECURITY

All performance outcomes will be delivered in accordance with DoD information assurance policies and requirements. While NDU operates in an ".edu" environment that promotes a variety of learning and collaboration methods, any solutions identified shall be consistent with DoD security regulations. The contractor shall recommend innovative solutions that can be achieved within DoD boundaries.

Contractor personnel shall have a favorably completed background investigation in accordance with their position designations (IT-I/IT-II/IT-III) before being granted access to any NDU or other DoD information technology systems.

- IT-I positions are designated as critical sensitive positions and require a favorably completed SSBI.
- IT-II positions are designated as non-critical sensitive positions and require a favorably completed NACLC investigation.
- IT-III positions require a favorably completed NACLC.

DoD 8570.01-M Section 2.3.9 requires contractor personnel supporting IA functions to obtain the appropriate DoD-approved IA baseline certification prior to being engaged.

C.5.2 INFRASTRUCTURE

The contractor shall initially operate within the IT infrastructure that exists across the NDU enterprise. The contractor shall use GFP and review the hardware and software list initially provided by the Government to determine end-of-service life and license renewal/upgrade schedules. This does not mean that the existing computing environment is the "end state." The contractor shall support the Government's objective to consolidate, modernize, update, and improve functionality, connectivity, application relevance, and IT business processes.

C.5.3 TRANSITION

The contractor shall ensure that there will be minimum service disruption to vital Government business and no service degradation during and after TO transition. Upon assumption of duties and ownership of the network (at or around August 19, 2012), contractor staff shall be fully

compliant with DoD 8570 and DoD 5200. No privileged accounts or elevated rights will be granted to employees without the proper, documented certifications as outlined by those DoD manuals. All transition activities shall be completed within 90 calendar days after TO award.

The contractor shall be responsible for performing to their SLAs and performance measures in the NDU enterprise environment no later than 90 calendar days after TO award. The contractor shall schedule and coordinate a Project Kick-Off Meeting at the location approved by the Government within five business days after TO award. The meeting will provide an introduction between the contractor personnel and Government personnel who will be involved with the TO.

The meeting will provide the opportunity to discuss technical, management, and security issues, and travel authorization and reporting procedures. At a minimum, the attendees shall include vital contractor personnel, representatives from the directorates, other relevant Government personnel, and the FEDSIM COR.

The contractor shall facilitate the accomplishment of a seamless transition from the incumbent to an incoming contractor/Government personnel at the expiration of the TO. The contractor shall provide a Transition-Out Plan NLT 90 calendar days prior to expiration of the TO. The contractor shall also establish and maintain effective communication with the incoming contractor/Government personnel for the period of the transition via weekly status meetings. The contractor shall identify how it will coordinate with the incoming contractor and/or Government personnel to transfer knowledge regarding the following:

- Project management processes
- Points of contact
- Location of technical and project management documentation
- Status of ongoing technical initiatives
- Appropriate contractor—to-contractor coordination to ensure a seamless transition.
- Transition of Key Personnel
- Schedules and milestones
- Actions required of the Government.

C.5.4 TELECOMMUTING

The contractor's solution may provide efficiencies that may allow telework as long as the telework solution adheres to DoD guidelines. Contractor personnel will not be allowed to take home Government-furnished property.

C.5.5 GFP LAPTOPS

NDU students were issued laptops as GFP as part of their course of study. This policy is evolving to a "bring your own device" paradigm.

C.5.6 GREEN IT

The PWS shall incorporate sustainable operations and maintenance practices and "green IT" solutions as applicable.

C.5.7 CONFIGURATION BOARDS

Recommendations during the task order's period of performance for IT infrastructure improvements and modernization efforts shall be in accordance with NDU Enterprise

Configuration Control Board (CCB) and NDU Configuration Advisory Board (CAB) approval and guidance. NDU Configuration Management processes are in accordance with DoD policies.